

[3.0062]

A NEW SPECIES OF *Psilotreta* FROM NORTH CAROLINA  
(Trichoptera: Odontoceridae)<sup>1</sup>

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A survey of the Trichoptera of the Coweeta Hydrological Laboratory in Macon Co., North Carolina, has resulted in the discovery of a new species of *Psilotreta* Banks from the southern Appalachians. The following description is offered to give workers in aquatic biology, especially those concerned with rearing and use of the metamorphotype technique, a more accurate determination of species in this genus in the eastern United States.

The author is pleased to name this species for H. H. Ross, who has contributed so much to our knowledge of the North American Trichoptera fauna.

*Psilotreta rossi* NEW SPECIES

*Male*.—Length from head to tip of wings 10 mm; head, thorax, and legs yellowish brown; forelegs appearing darker at tibia and tarsi due to heavy brush of dark brown hair. Abdomen black dorsally, slightly lighter ventrally. Maxillary palpi with first two segments short, bearing a mesal brush of hair that extends from midway on the first segment to the tip of the third; third and fourth segments each about the same length as the first and second combined; fifth segment about one-fourth longer than the fourth. Genitalia as in Figs. 1-3. Ninth segment rather sinuous and narrowed above at point of insertion of cerci. Ninth tergite long and narrowed in middle (in dorsal view) slightly bulbous at apex with a small apical notch. Basal hooks of tenth tergite curled with pointed tip projecting posteriodorsally (Figs. 1-2). From the lower side of the apex of the tenth tergite arise a pair of sclerotized, elongate, slightly sinuate, robust plates which are rather pointed at their apices (visible only as rather blunt plates in dorsal view, Fig. 2). Cerci rather elongate and slightly pointed at their apices, widest at a point about one-fourth distance from base. Claspers each with basal segment widest near base; second segment about one-fourth length of the first, each with two heavily sclerotized teeth, one

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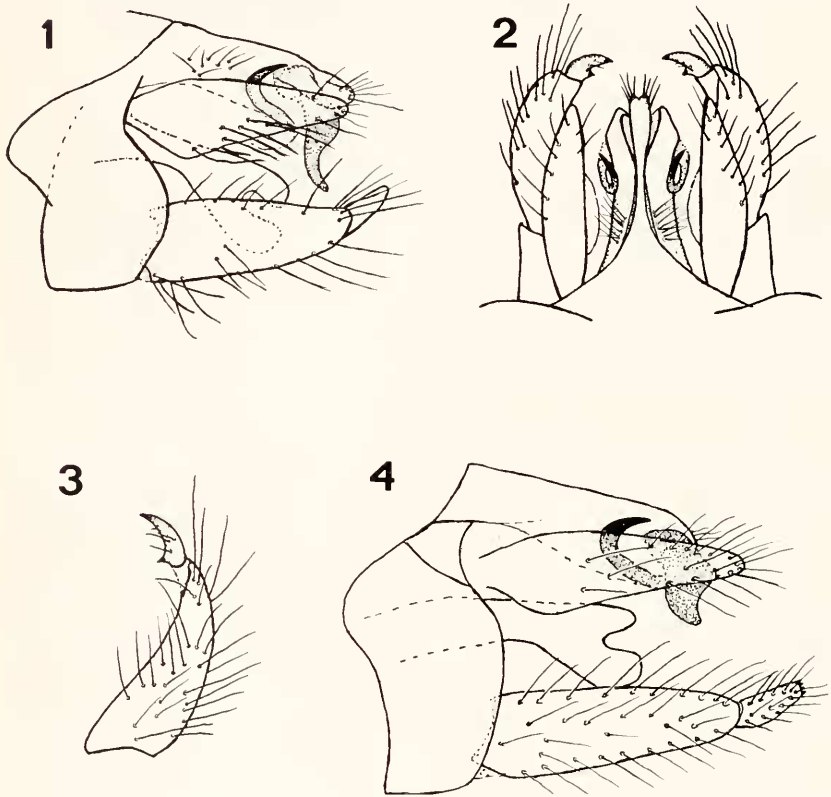
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mesally near base and another at the dorso-mesally curved apex (Figs. 1, 3). Adeagus with a slender, tubular base and a sclerotized U-shaped process at apex which is surrounded by a membranous sheath (surrounding sheath not shown on drawing, Fig. 1).

*Female*.—Unknown.

*Habitat*.—A small spring seep at 3800 feet elevation in the southern Appalachians.

*Holotype*.—Male; Coweeta Hydrological Laboratory, Macon Co., North Carolina, 15 June 1970; J. B. Wallace.



Figs. 1-3. *Psilotreta rossi* new species, male genitalia. Fig. 1, lateral view; Fig. 2, dorsal view; Fig. 3, clasper, ventral view; Fig. 4, *Psilotreta rufa* (Hagen), male genitalia, lateral view.

*Psilotreta rossi* will not key to any species in Ross 1944 (p. 286). This species appears closest to *rufa* (Hagen). *P. rossi* can be separated from *rufa* by the following features. The apical sclerotized plates of the tenth tergite are longer and slender in *rossi* compared to the shorter, more robust apical processes in *rufa* (cf Figs. 1 and 4). The posterior extension of the ninth tergite slightly surpasses the sclerotized apical plates (in dorsal view) in *rossi* (Fig. 2) whereas in *rufa* the extension of the ninth tergite does not surpass the apical plates. In addition, the second segment of the claspers has two teeth (Fig. 3) in *rossi* and 5-6 teeth in *rufa*.

The holotype specimen is deposited in the University of Georgia collection.

#### Literature cited

Ross, H. H. 1944. The Caddis Flies or Trichoptera of Illinois. Bull. Illinois Nat. Hist. Surv., 23: 326 p.

2.0062. A new species of *Psilotreta* from North Carolina (Trichoptera: Odontoceridae). Abstract.—A new species of *Psilotreta* (Trichoptera: Odontoceridae) is described from the southern Appalachians. The species, *P. rossi*, is closest related to *P. rufa* (Hagen). —J. B. Wallace, Dep't. Entomology, Univ. of Georgia, Athens, GA 30601.

*Descriptors:* Trichoptera; Odontoceridae; *Psilotreta rossi*, n. sp.; North Carolina.